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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,806

02/08/2006

David John Goodwin

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4457

20411 7590 10/30/2007  
THE BOC GROUP, INC.  
575 MOUNTAIN AVENUE  
MURRAY HILL, NJ 07974-2064

EXAMINER
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TRIEU, THERESA

ART UNIT	PAPER NUMBER
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3748

MAIL DATE	DELIVERY MODE
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10/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/567,806

Applicant(s)

GOODWIN ET AL.

Examiner

Theresa Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,8,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8,13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

This Office Action is responsive to the applicants' amendment filed on Aug. 16, 2007.

Claims 1, 4, 5 and 8 have been amended. Claim 14 has been added. Accordingly, claims 1, 3-5, 8, 13 and 14 are pending in this application.

Applicants' cooperation in correcting the informalities in the specification is appreciated. However, a few minor informalities contain in abstract.

#### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet **within the range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 1, 4, 5 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Schofield (Publication Number EP 679810).

Regarding claims 1, 4, 5 and 14, Schofield (as shown in Fig. 2) discloses a scroll wall arrangement for a scroll compressor comprising: a fixed scroll wall 5 and an orbiting scroll wall 8, which together define a plurality of flow paths having respective inlets 20-22 for simultaneous pumping at different pressures, wherein the plurality of flow paths comprise a first flow path extending from a first inlet 20 to an outlet 25 and a second flow path extending from a second inlet 21, 22 to the outlet 25, and wherein the second inlet is isolated from the first flow path, and wherein the first and second flow paths converge to form a merged flow path (24, see Fig.2); the pressure at the second inlet during pumping being higher/r lower than the pressure at the first inlet (20).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield in view of Asano et al. (Asano) (Patent Number 4,696,627).

Schofield discloses the invention as recited above; however, Schofield fails to disclose a position of the second inlet with respect to the first flow path.

Asano teaches that it is conventional in the scroll compressor art to utilize the second inlet 11 being isolated from the first flow path by at least one wrap of the arrangement. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the position of the second inlet, as taught by Asano in the Schofield apparatus, since the use thereof would have controlled flow rate to the first and second suction chambers for enhancing the refrigerant or cooling performance.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield in view of Reich et al. (Reich) (Patent Number 4,919,599).

Schofield discloses the invention as recited above; however, Schofield fails to disclose a turbomolecular pump being between the first chamber for pumping at low pressure and the scroll compressor.

Reich teaches that it is conventional in the art to utilize a first chamber 1 and a second chamber 3 having a respective interconnection therebetween; a turbomolecular pump 4, 6 having an inlet connected to the first chamber 1 for pumping at relatively low pressures. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the turbomolecular pump, as taught by Reich in the Schofield apparatus, since the use

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thereof would have improved the performance efficiency and preventing the disturbances in the area of the vacuum pump.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield in view of Asano et al. (Asano) (Patent Number 4,696,627).

Schofield discloses the invention as recited above; however, Schofield fails to disclose a position of the second inlet with respect to the first flow path.

Asano teaches that it is conventional in the scroll compressor art to utilize the second inlet 11 being isolated from the first flow path by one revolution of the fixed scroll wall. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the position of the second inlet, as taught by Asano in the Schofield apparatus, since the use thereof would have controlled flow rate to the first and second suction chambers for enhancing the refrigerant or cooling performance. Also, applicants note that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have positioned of the second inlet being isolated from the first flow path by one revolution of the fixed scroll wall, since the scroll compressor would have performed equally well in that location and the mere repositioning of parts not effecting the functioning of the device involves only routine skill in the art, *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (see MPEP §2144.04).

#### ***Response to Arguments***

6. Applicants' arguments with respect to claims 1, 3-5, 8, 13 and 14 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Communication***

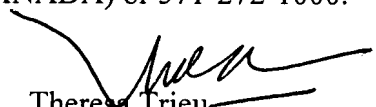
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT  
October 26, 2007



Theresa Trieu  
Primary Examiner  
Art Unit 3748